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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,279	12/14/2000	Seiji Hiroshima	MITS:024	7933

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ROSSI & ASSOCIATES
P.O. Box 826
Ashburn, VA 20146-0826

EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/737,279

Applicant(s)

HIROSHIMA ET AL.

Examiner

Melody M. Burch

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 30 October 2003.

2a) ☐ This action is **FINAL**.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-10 is/are rejected.

7) ☒ Claim(s) 11 is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 18.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/30/03 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

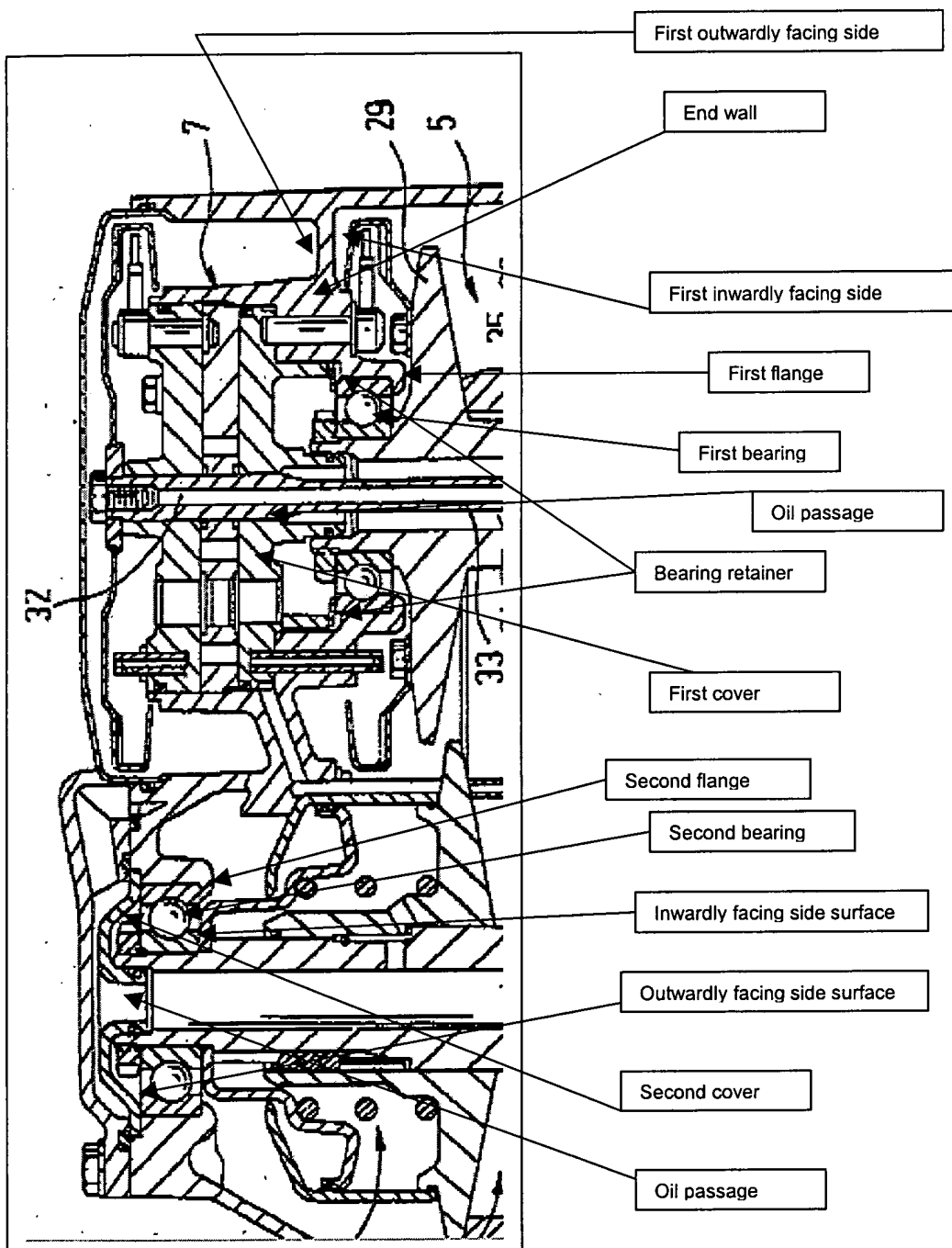
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4543852 to Svab et al.

Re: claims 1 and 3. Svab et al. show in the figure a continuously variable transmission comprising : a CVT mechanism comprising: a primary shaft 17 having a primary pulley 5, a secondary shaft shown connected to element 9 having a secondary pulley 9, and an endless belt 36 wound on the primary pulley and the secondary pulley, a housing in the area of the lead arrow of number 7 that accommodates the continuously variable transmission mechanism, the housing having an end wall as labeled on pg. 4 of this Office Action that is formed with a first bearing mounting hole as

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shown through which one end portion of one of the primary shaft and the secondary shaft penetrates, the end wall having a first outwardly facing side as labeled and a first inwardly facing side as labeled opposite to the first outwardly facing side around the first bearing mounting hole, the first inwardly facing side being located closer to the primary or secondary pulley associated with the one end portion of the one shaft than the first outwardly facing side, a first bearing as labeled fitted in the first bearing mounting hole and allowing the one shaft to be supported rotatably by the end wall, a first flange as labeled extending radially from the first inwardly facing side toward the first bearing mounting hole, a bearing retainer as labeled provided on the first outwardly facing side of the end wall and projecting radially inwardly toward the first bearing mounting hole, and engaging the first bearing to pinch the first bearing against the first flange as shown, and a first cover as labeled connected to the housing and covering the one end portion of the one shaft and the bearing retainer.



Re: claims 2 and 10. Svab et al. show in the figure the limitation wherein the end wall is formed with a second bearing mounting hole as shown through which one end portion of the other of the primary shaft and the secondary shaft penetrates, the CVT further comprising: a second bearing as labeled on pg. 4 that is fitted to the second bearing mounting hole and allows the other shaft to be supported rotatably by the end wall, an urging member or spring of element 8 that is in contact with (or provided on indirectly), via the element abutting the left side of the spring, an inwardly facing side surface of the second bearing as labeled, the urging member being elastically deformable in an axial direction of the primary shaft and the secondary shaft, and a second cover as labeled that is connected to the housing and covers the one end portion of the other shaft, and cooperates with the urging member to pinch the second bearing in the axial direction.

Re: claims 4-6. Svab et al. show in the figure the limitation wherein the depth of the first bearing mounting hole (particularly the distance between the inside of the first flange and the first outwardly facing side portion of the end wall shown to the right of the top portion of the bearing retainer), which extends in an axial direction of the primary shaft and the secondary shaft, is shorter than the thickness of the first bearing as shown, which extends in the axial direction, and wherein the first bearing receives urging force in a direction from the bearing retainer to the first flange and is thereby in contact with the first flange as shown.

Re: claims 7 and 8. Svab et al. show in the figure the CVT further comprising a second flange as labeled on pg. 4, the end wall having a second outwardly facing side

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and a second inwardly facing side opposite to the second outwardly facing side around the second bearing mounting hole, wherein: the second flange extends radially from the second inwardly facing side toward the second bearing mounting hole, the second cover contacts the second outwardly facing side of the end wall and an outer side surface of the second bearing in the same plane as shown; the depth of the second bearing mounting hole, which extends in the axial direction is shorter than the combined thickness of the second bearing and the urging member in a free state, which combined thickness extends in an axial direction, and the second bearing receives urging force in a direction from the urging member (via the element abutting the left side of the spring of element 8) to the second cover and is thereby in contact with the second cover as shown.

Re: claim 9. Svab et al. show in the figure the limitation wherein each of the first and second covers has an oil passage as labeled (Examiner notes that the passages may be considered to be oil passages since element 7 is an oil pump that dispenses oil) through which operation oil is supplied to the CVT (via the unsealed crevices).

Allowable Subject Matter

4. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Svab reference fails to show the limitation of the flange supporting the urging member.

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Response to Arguments

5. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

mmb
mmb

January 30, 2004

Melody M. Burch
1/30/04